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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,518	03/26/2004	Thomas H. Barrows	010414-9012	1213
23510 7590 01/11/2007 MICHAEL BEST & FRIEDRICH, LLP ONE SOUTH PINCKNEY STREET P O BOX 1806 MADISON, WI 53701			EXAMINER WARE, DEBORAH K	
			ART UNIT	PAPER NUMBER..
			1651	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/11/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/810,518

Applicant(s)

BARROWS ET AL

Examiner

Deborah K. Ware

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32-50 is/are pending in the application.
- 4a) Of the above claim(s) 49 and 50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/28/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 32-50 are pending.

#### ***Election/Restrictions***

Applicant's election with traverse of Group I in the reply filed on September 19, 2006, is acknowledged. The traversal is on the ground(s) that Groups I and II should be rejoined because no serious burden of search. This has been found persuasive because upon conducting the search for Group I it was determined a prior art reference may read on both Groups I and II.

The requirement is still deemed proper and is therefore made FINAL for remaining pending claims not discussed above.

Claims 49-50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group III, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 19, 2006.

Claims 32-48 are examined on the merits.

#### ***Preliminary Amendment***

The Preliminary Amendment filed August 8, 2004 and May 25, 2006 have been received and entered. Claims 1-31 were canceled.

#### ***Drawings***

Color photographs and color drawings are not accepted unless a petition filed under 37 CFR 1.84(a)(2) is granted. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color

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photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings and black and white photographs have been satisfied. See 37 CFR 1.84(b)(2).

### ***Information Disclosure Statement***

The information disclosure statements (IDSs) submitted on May 16, 2005; November 28, 2005; April 10, 2006 and April 25, 2006 were received. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 32-45 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by US2003/0049839A1 (Romero-Ortega et al), cited on enclosed PTO-892 Form.

Claims are drawn to a graft comprising a bioabsorbable filament having a central lumen and skin cells disposed within the lumen.

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Romero-Ortega et al teach a graft comprising a bioabsorbable filament having a central lumen and skin cells disposed within and adjacent to the lumen, in terms of a cell growth scaffold providing channels comprising extracellular matrix gel (see abstract and page 4, column 1 [0027], lines 4-5. Also note page 5, column 1, [0042], line 3 and column 2, [0053], lines 13-15. The skin includes epidermal cells and dermal cells. The lumen inherently has an interior wall because the skin cells are disposed within the channels comprising the lumen and adhere to the interior surface, note page 4, [0029], lines 1-4. Furthermore, the lumen is inherently smooth, porous, hydrophilic and porous because it is comprised of extracellular matrix gel which has all of these properties. In addition the gel is a well recognized bioabsorbable material which has attachment binding site moieties.

The claims are identical to the teachings of Romero-Ortega et al and are, therefore, considered to be anticipated by the teachings therein. For reasons noted above certain features if not specifically disclosed are considered to be inherent.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over US2003/0049839 ('839), cited above, in view of US2002/0090725 (Simpson et al), cited on enclosed PTO-892 Form.

Claims and '839 are discussed above.

Simpson et al teach that cell attachment binding site moieties, such as Arg-Gly-Asp, known as the RGD site which is a peptide sequence present in many extracellular matrix materials, note page 7, [0079], lines 10-12, which serves as a binding site for cell adhesion.

The claims differ from '839 in that the RGD sequence or peptide comprising a cell attachment domain sequence Arg-Gly-Asp is not specifically disclosed.

It would have been obvious to one of ordinary skill in the art to provide the extracellular matrix gel disclosed by '389 for cell adhesion because it is well known as disclosed by Simpson et al to provide for a cell attachment domain sequence Arg-Gly-Asp. Clearly one of skill would have been motivated by the teachings of '389 and Simpson et al to provide for a bioabsorbable material which has cell attachment binding site moieties present to serve as a binding site for skin cell adhesion within the lumen. Thus, the claims are deemed prima facie obvious over the cited prior art.

All claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892 and/or PTO-1449. Therefore, the claims are properly rejected.

The remaining references listed on the enclosed PTO-892 and/or PTO-1449 are cited to further show the state of the art.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 571-272-0924. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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*Deborah K. Ware*  
**DEBORAH K. WARE**  
**PATENT EXAMINER**

Deborah K. Ware

January 6, 2007